



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2023-0011; Project Identifier MCAI-2022-00211-T; Amendment 39-22478; AD 2023-12-19]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus SAS Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2013-07-03, which applied to all Airbus SAS Model A330-200, A330-200 Freighter, A330-300, A340-200, and A340-300 series airplanes; and Model A340-541 and A340-642 airplanes. AD 2013-07-03 required repetitive inspections for degradation of the bogie pivot pins and for any cracks and damage of the pivot pin bushes of the main and central landing gear; an inspection of the affected bogie pivot pins for corrosion and base metal cracks; and repairing or replacing bogie pivot pins and pivot pin bushes, if necessary. This AD was prompted by development of a modification that address the unsafe condition and a determination that a parts installation prohibition is necessary. This AD continues to require certain actions in AD 2013-07-03, add an optional modification that would terminate the repetitive inspections, and add a parts installation prohibition, as specified in a European Union Aviation Safety Agency (EASA), which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:**

*AD Docket:* You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-0011; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

*Material Incorporated by Reference:*

- For material incorporated by reference in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); website [easa.europa.eu](https://easa.europa.eu). You may find this material on the EASA website at [ad.easa.europa.eu](https://ad.easa.europa.eu).

- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-0011.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 206-231-3229; email [vladimir.ulyanov@faa.gov](mailto:vladimir.ulyanov@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part

39 to supersede AD 2013-07-03, Amendment 39-17407 (78 FR 21227, April 10, 2013) (AD 2013-07-03). AD 2013-07-03 applied to all Airbus SAS Model A330-200, A330-200 Freighter, A330-300, A340-200, and A340-300 series airplanes; and Model A340-541 and A340-642 airplanes. AD 2013-07-03 required repetitive inspections for degradation of the bogie pivot pins and for any cracks and damage of the pivot pin bushes of the main and central landing gear; an inspection of the affected bogie pivot pins for corrosion and base metal cracks; and repairing or replacing bogie pivot pins and pivot pin bushes, if necessary. The FAA issued AD 2013-07-03 to detect and correct cracks and damage to the main and central landing gear, which could result in the collapse of the landing gear and adversely affect the airplane's continued safe flight and landing.

The NPRM published in the *Federal Register* on January 13, 2023 (88 FR 2283). The NPRM was prompted by AD 2022-0025R2, dated August 9, 2022, issued by EASA (EASA AD 2022-0025R2) (also referred to as the MCAI). The MCAI states that since EASA issued AD 2012-0053, dated March 30, 2012, Airbus developed mod 207165 and mod 207649, introducing a new bogie pivot pin for certain main landing gear. The MCAI includes the modification as an optional terminating action for the repetitive inspections. The MCAI also determined that a parts installation prohibition is necessary. The MCAI also states that main and central landing gear overhauls contains actions that are equivalent to those required by EASA AD 2012-0053, dated March 30, 2012, and therefore, credit is provided for those actions.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-0011.

In the NPRM, the FAA proposed to continue to require certain actions in AD 2013-07-03, add an optional modification that would terminate the repetitive inspections, and add a parts installation prohibition, as specified in EASA AD 2022-0025R2. The FAA is issuing this AD to address cracks and damage to the main and central landing

gear. The unsafe condition, if not addressed, could result in the collapse of the landing gear and consequent damage to the airplane and injury to occupants.

## **Discussion of Final Airworthiness Directive**

### **Comments**

The FAA received comments from Air Line Pilots Association, International (ALPA), who supported the NPRM without change.

The FAA received additional comments from Delta Air Lines (Delta). The following presents the comments received on the NPRM and the FAA's response to each comment.

### **Request for Additional Exception to the MCAI**

Delta requested an exception to provide a terminating action as a means of compliance with the proposed optional terminating action of paragraph (g) of the proposed AD. Delta stated that service information specified in EASA 2022-0025R2 for modifying the main landing gear (MLG) while on the airplane wing references other information that seems to allow for modification of the MLG while it is off the wing. Delta received confirmation from Airbus that it is acceptable to replace unmodified MLG with MLG that has been previously modified off the wing. Delta also pointed out that the service information specified in EASA 2022-0025R2 specified an AMM task that is intended for use while the MLG is on the wing and an exception would need to accommodate a reference to an AMM task that is intended for use while the MLG is off the wing.

The FAA agrees to add an exception to paragraph (h) of this AD that allows for installing a MLG that was modified off the wing. Installing a previously modified MLG that was modified off the wing is acceptable for the optional terminating action that terminates the repetitive inspections required by this AD.

## **Conclusion**

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

## **Related Service Information Under 1 CFR Part 51**

EASA AD 2022-0025R2 specifies procedures for repetitive detailed inspections for degradation of the bogie pivot pins and for any cracks and damage of the pivot pin bushes of the main and central landing gear; an non-destructive test (NDT) inspection (i.e., magnetic particle inspection) of the affected bogie pivot pins for corrosion and base metal cracks; and corrective actions if necessary (i.e., repairing or replacing bogie pivot pins and pivot pin bushes). EASA AD 2022-0025R2 also provides an optional modification, which terminates the repetitive inspections. EASA AD 2022-0025R2 also includes a parts installation prohibition for the affected parts. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **Costs of Compliance**

The FAA estimates that this AD affects 115 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

### Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained actions from AD 2013-07-03	22 work-hours X \$85 per hour = \$1,870	\$0	\$1,870	\$215,050

### Estimated costs for new optional action

Labor cost	Parts cost	Cost per product
24 work-hours X \$85 per hour = \$2,040	Up to \$30,150	Up to \$32,190

### Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
Up to 8 work-hours X \$85 per hour = \$680	Up to \$2,122	Up to \$2,802

### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive (AD) 2013-07-03, Amendment 39-17407 (78 FR 21227, April 10, 2013); and

- b. Adding the following new AD:

**2023-12-19 Airbus SAS:** Amendment 39-22478; Docket No. FAA-2023-0011; Project Identifier MCAI-2022-00211-T.

**(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD replaces AD 2013-07-03, Amendment 39-17407 (78 FR 21227, April 10, 2013) (AD 2013-07-03).

**(c) Applicability**

This AD applies to all Airbus SAS airplanes identified in paragraphs (c)(1) through (5) of this AD; certificated in any category.

(1) Model A330-201, -202, -203, -223, -223F, -243 and -243F airplanes.

(2) Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(3) Model A340-211, -212, and -213 airplanes.

(4) Model A340-311, -312, and -313 airplanes.

(5) Model A340-541 and -642 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 32, Landing gear.

**(e) Unsafe Condition**

This AD was prompted by reports of cracks in the bogie pivot pin of the main and central landing gear bogie beams. Investigation indicated these findings were the result of material heating due to friction between the bogie pivot pin and bush, leading to chrome detachment and chrome dragging on the bogie pivot pin. Since issuance of AD 2013-07-03, an optional terminating modification was developed and it was also determined that a parts installation prohibition is necessary. The FAA is issuing this AD to address cracks and damage to the main and central landing gear. The unsafe condition, if not addressed, could result in the collapse of the landing gear and consequent damage to the airplane and injury to occupants.



**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Requirements**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2022-0025R2, dated August 9, 2022 (EASA AD 2022-0025R2).

**(h) Exceptions to EASA AD 2022-0025R2**

(1) Where EASA AD 2022-0025R2 refers to March 1, 2022 (the effective date of EASA AD 2022-0025, dated February 15, 2022), this AD requires using the effective date of this AD.

(2) Where EASA AD 2022-0025R2 refers to April 13, 2012 (the effective date of EASA AD 2012-0053, dated March 30, 2012), this AD requires using May 15, 2013 (the effective date of AD 2013-07-03).

(3) Where paragraph (4) of EASA AD 2022-0025R2 specifies corrective actions for the non-destructive test (NDT) inspection, replace the text “the base metal of the affected part is found corroded” with “the bogie pivot pin is found corroded or the base metal is found cracked.”

(4) This AD does not adopt the “Remarks” section of EASA AD 2022-0025R2.

(5) For the terminating modification specified in paragraph (7) of EASA AD 2022-0025R2, replacement of the unmodified main landing gear (MLG) with MLG that has been previously modified off the airplane is acceptable for compliance, provided the modification was done as specified in the applicable Safran Landing Systems Service Bulletin A33/34-32-315, dated November 28, 2017; A33/34-32-319, dated September 13, 2018; or A33/34-32-320, dated September 13, 2018; and the test after the modification was done as specified in AMM task 32-11-11-400-801-A.

**(i) No Reporting Requirement**

Although the service information referenced in EASA AD 2022-0025R2 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

**(j) Additional AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the International Validation Branch, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(ii) AMOCs approved previously for AD 2013-07-03 are approved as AMOCs for the corresponding provisions of EASA AD 2022-0025R2 that are required by paragraph (g) of this AD.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Validation Branch, FAA; or EASA; or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: Except as required by paragraph (j)(2) of this AD, if any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests

that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(k) Additional Information**

For more information about this AD, contact Vladimir Ulyanov, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY; telephone 206-231-3229; email [vladimir.ulyanov@faa.gov](mailto:vladimir.ulyanov@faa.gov).

**(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2022-0025R2, dated August 9, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0025R2, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); website [easa.europa.eu](http://easa.europa.eu). You may find this EASA AD on the EASA website at [ad.easa.europa.eu](http://ad.easa.europa.eu).

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov), or go to: [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html).

Issued on June 21, 2023.

Michael Linegang, Acting Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

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